

Date: Thursday, 3/30/2006 8:32:26 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : CROSSTUBE EXTRUSION (407 AFT)
Job Number : 26424	
Estimate Number : 10031	
P.O. Number : <i>NIA</i>	Part Number : D6010115
This Issue : 3/30/2006 S.O. No. : <i>NIA</i>	Drawing Number : D6010 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>NIA</i> Type : LANDING GEAR	Drawing Revision : A
Previous Run : <i>NIA</i>	Material : <i>NIA</i>
Written By : <i>[Signature]</i>	Due Date : 7/30/2006 Qty: <i>14</i> Um: <i>12</i> Each
Checked & Approved By : <i>[Signature]</i> 06.03.30	
Comment : Est Rev: A 01.08.17 New Issue SM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *00000933**AP 06/04/03*

a) Order as per Dwg D6010

b) Material: 2.250 x 0.320 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube

c) Minimum ultimate tensile strength = 77 ksi

d) Minimum tensile yield strength = 66 ksi

e) Tolerance are per ASTM B210 (see details on Dwg D6010)

f) Material certification required

2.0	D6010115P	Crosstube Material
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)

Crosstube Material

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg

06/11/03
14
06-11-22 (14)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/12/05
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: CROSSTUBE EXTRUSION (407 AFT)

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Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

9ml 06/12/05

14

7.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/12/05

14

Job Completion



06/12/05

W/O:		WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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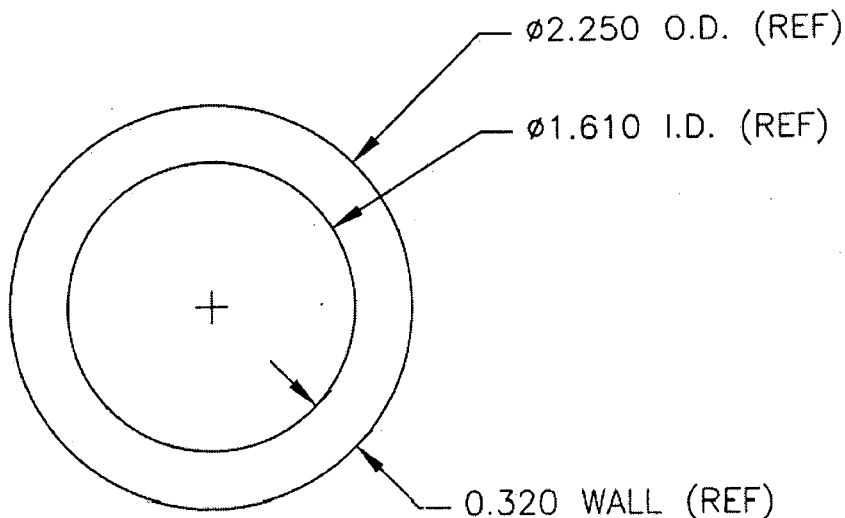
NOTE: Date & initial all entries



DESIGN #	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6010	REV. A SHEET 1 OF 1
DATE 01.08.16		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	01.08.16	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.08.17



NOTES

- 1) D6010-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 115" LONG TUBE: D6010-115

- 2) MATERIAL: 2.250 OD x 0.320 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.006 MEAN (± 0.012 INCLUDING OVALITY)
WALL: ± 0.015 MEAN (± 0.032 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

SHOP COPY
RETURN TO
ENGINEERING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 26424

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ALUnna

Abnahmeprüfzeugnis 3.1 - EN 10204:2004**Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004****Kunde:** Dart Aerospace Ltd.**Client:**1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada**Zeugnisnummer:** 756/06**Cert No. / No. du certificat:****Bestellnummer:** PO 00000933**Order No. / No. de commande****Auftrag:** 18609/5**Our Reference/Notre Reference:****Produkt:** Rohre nahtlos gepresst**Product / Produit:** Tubes seamless extruded**Spezifikation:** AMS - QQ - A - 200/11E; -**Specification:****Werkstoff:** 7075**Alloy/Alliage:****Zustand:** T 6511**Temper/État****Abmessung:** 2,250 INCH x 1,610 INCH x 0,320 INCH x 115,000 INCH**Size / Dimension**

D6010-115

Kennzeichnung: ALUnna-Cert No.756/06-7075-T65-Cast No 80002-AMS-QQA-200/11E-2.250" OD x 0.320" Wall-Heat No.637/08-
Marking/Marquage: Lot18609/5/1-P.O.00000933**Lieferung****Delivered Material / Matériel délivré:**

PCS

14

lbs

315

Country of Manufacture: Germany**1. Chemische Analyse****Chemical Analysis / analyse chimique**

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ min.			1,2		2,1	0,18	5,1						
Cast No. max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
80002	0,088	0,140	1,42	0,079	2,52	0,178	5,81	0,036	0,004	0,023	0,001	0,001	0,0001

Hydrogen content: 0,13 ccm/100 g Al

Elements without indication < 0,01 %

2. Mechanische Eigenschaften**Mechanical Properties / Valeurs Mécaniques**

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat No.
min. max.	81,0	73,0	7,0			
1	86,855	79,895	8,5		172	637/08 - 14 pcs.

RMS outside 25 - max. 20 µ"

**Ergebnis der
Prüfungen:**

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results:

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order

Resultats:

Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

